UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,079	10/07/2003	Kwan-Ho Chan	CHAN-33 CON	9937

7590 03/14/2007

Mark J. Pandiscio
Pandiscio & Pandiscio
470 Totten Pond Road
Waltham, MA 02154

EXAMINER	
WOO, JULIAN W	
ART UNIT	**PAPER NUMBER**
3731	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/14/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/680,079	CHAN, KWAN-HO	
	Examiner	Art Unit	
	Julian W. Woo	3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 January 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *8,17,19-21,23,31,32,36 and 38-41* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *8,17,19-21,23,31,32,36 and 38-41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 8, 20, 21, 23, 36, and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Violante (3,840,017). Violante discloses, at least in figures 1 and 2 and col. 2, lines 3-15; a surgical apparatus for delivering and retrieving suture (32), where the apparatus includes a cannula (20) having a distal end and a proximal end and a lumen extending therebetween; a handle(10) having a distal end and a proximal end, a passageway (22) extending through at least a portion of the handle, and an exposed, planar surface with a platform (28) disposed between the passageway and the distal end of the handle, where the proximal end of the cannula is attached to the handle and the lumen is in communication with the exposed surface of the handle, where the exposed surface is adapted to support a suture extending through the handle and allow movement of suture with a thumb or finger, where the passageway is provided with an opening (24) at the handle proximal end, where the opening is positioned to permit suture to be fed into the opening along a pathway parallel to the lumen (when the spool is removed for threading of the suture into the passageway), and where the distal end (42) of the cannula is configured to drive a suture against tissue without severing the suture.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Violante (3,840,017). Violante discloses the invention substantially as claimed, but does not disclose that the exposed surface ranges from about 3/8 to about 3 ½ inches in length and does not disclose that the handle has a generally triangular, transverse cross-section. Nevertheless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to size the exposed surface in the range as claimed, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. With respect to the limitation of the handle having a generally triangular, transverse cross-section: It would have obvious to one having ordinary skill

in the art at the time the invention was made to shape the handle as claimed, since it has been held to be a matter of obvious design choice and within the general skill of a worker in the art (as the applicant has also admitted) to shape the handle according to its intended use.

5. Claims 31 and 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Violante (3,840,017) in view of Burkhart et al. (5,681,333). Violante discloses the invention substantially as claimed. Violante discloses a surgical apparatus including a passer assembly with a handle and a cannula with a lumen, the handle including a passageway in an elongated body, a recess in the body defining a planar surface, and a nose portion extending distally of the recess and defining a bore in communication with the passageway, the planar surface, and the lumen. However, Violante does not disclose a puller assembly or loop retriever including a suture engager movable through the nose portion bore, through the cannula lumen, and distally to connect to a suture and proximally to withdraw the suture engager and the connected suture. Claim 38 is rejected under 35 U.S.C. 102(e) as being anticipated by. Burkhart et al. teach, in figures 6-9, a surgical apparatus for delivering and retrieving suture, where the apparatus includes a passer assembly (50) and a puller assembly (66) or loop retriever (70), where the passer assembly includes a handle (54) and a cannula (60), where the handle comprises an elongated body having a passageway extending distally from a suture entryway (62) axially disposed at a proximal end of the body, a recess (56) in the body defining a planar surface extending along an axis of the passageway, and a nose portion (distal end of 54) extending distally of the recess, where the puller assembly or

loop retriever (70) is movable through the passageway, the nose portion, and cannula of the passer assembly. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made, in view of Burkhart et al., to include a puller assembly as claimed with the apparatus of Violante. Such an assembly would allow the advancement (and retrieval) of suture and suture loops (without breakage) in the small confines of Violante's passer assembly and surgical spaces as in a subacromial space.

6. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Violante (3,840,017) in view of Burkhart et al. (5,681,333), and further in view of Goldrath (5,330,488). Violante in view of Burkhart et al. discloses the invention substantially as claimed, but does not disclose a puller assembly that is a hook retriever. Goldrath teaches, in col. 5, lines 42-48, a puller assembly that can be a loop retriever or a hook retriever, among other configurations. Thus, it would have been a matter of obvious design choice to configure the puller assembly of Violante in view of Burkhart et al. as a loop retriever or a hook retriever. The choice would be dependent upon a user's desired performance features for a retriever, and most important, whether the retriever is able to capture suture.

Response to Amendment

7. The rejection under 35 U.S.C. 112, 2nd paragraph is hereby withdrawn. Applicant's arguments with respect to claims 31, 32, 38, and 39 have been considered but are moot in view of the new ground(s) of rejection. With respect to arguments

regarding the rejection of claims 8, 17, 19, 20, 23, 36 based on the Violante reference: See the restatement of the rejection above. That is, Violante discloses a handle passageway with a proximal opening aligned with the longitudinal axis of the passageway, so the opening is in a position to permit suture to be fed into the opening along a pathway parallel to the passageway, where suture can be fed into the opening without the application of a spool or reel (or with an unmounted spool or reel). Violante discloses, in col. 2, lines 11-15, that the spool or reel is removable, so it is simply a convenient, and even optional, means for providing an extended length of suture material. The angling of the suture pathway, as illustrated in figure 2, occurs only after the suture has been threaded into the opening and the passageway along a pathway parallel to the passageway and after the spool or reel is rotatably mounted on the axle or pivot pin (30).

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian W. Woo whose telephone number is (571) 272-4707. The examiner can normally be reached Mon.-Fri., 7:00 AM to 3:00 PM Eastern Time, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anh Tuan Nguyen can be reached on (571) 272-4963. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Julian W. Woo
Primary Examiner

March 12, 2007